



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5 CHICAGO REGIONAL LABORATORY  
536 SOUTH CLARK STREET  
CHICAGO, ILLINOIS 60605

**Date:** 6/12/2018  
**Subject:** Review of Region 5 Data for Central Sands  
**To:** Water Division, WECA Region 5  
77 West Jackson Boulevard  
Chicago, IL 60604  
**From:** Nidia Fuentes, Chemist  
US EPA Region 5 Chicago Regional Laboratory

The data transmitted under this cover memo successfully passed CRL's data review procedures as documented in the current Quality Management Plan and applicable Standard Operating Procedures. In accordance with the EPA QA/G-8 *Guidance on Environmental Data Verification and Data Validation* and the U.S. EPA Region 5 RMD QMP, CRL performs data verification on all the data generated internally. CRL does not perform data validation or quality assessment procedures.

This report was reviewed and the information provided herein accurately represents the analysis performed.

A handwritten signature in cursive script that reads "Nidia Fuentes".

*Please contact the analyst with any technical report issues, Robert Thompson at (312)-353-9078 for sample project concerns, and Sylvia Griffin at (312)-353-9073 with data transmittal questions. Thank you.*

**Attached are Results for: Central Sands**

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**Analyses included in this report:**

TKN DA

Total Phosphorus DA

Report Name: 1805005 TKN DA Total Phosphorus DA FINAL Jun 12 18 1104



Environmental Protection Agency Region 5  
**Chicago Regional Laboratory**

536 South Clark Street, Chicago, IL 60605  
Phone:(312)353-8370 Fax:(312)886-2591

Water Division, WECA Region 5  
77 West Jackson Boulevard  
Chicago IL, 60604

Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

**Reported:**  
Jun-12-18 11:04

**Accredited Analyses included in this Report**



**Method:** EPA 351.2 in Water

**Analysis:** TKN DA

**Analyte**

**Certifications**

Total Kjeldahl Nitrogen

ISO/IEC 17025:2005

**Method:** EPA 365.4 in Water

**Analysis:** Total Phosphorus DA

**Analyte**

**Certifications**

Total Phosphorus

ISO/IEC 17025:2005

Analytes not listed above are not accredited by ANAB.



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Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

## Analysis Case Narrative

### General Information

A total of 98 water sample to be analyzed for Total Phosphorus (TP) were received at the Chicago Regional Laboratory on May 2 and 4, 2018 with work order 1805005 and 1805007 respectively. The samples were digested and analyzed using CRL SOP AIG034B Version #5 (based on EPA method 365.4). The samples were analyzed within the holding time. The designated analyst for the samples is Nidia Fuentes. Nidia can be reached at 312-353-9079.

### Sample Analysis and Results

The data reported herein meets any laboratory specifications referenced in the sampling Quality Assurance Project Plan (QAPP) *FINAL 2018 GW Sampling Plan4\_27\_2018*, and the limits referenced in CRL SOP AIG034B Version #5 (based on EPA method 365.4).

Samples for work order 1805005 were initial diluted 2-fold prior to digestion. This was needed to avoid exceeding the digestion reagent capacity and determination limits. Exceptions of field blanks and samples 1805005-53 and -54. The Gallery instrument software was inadvertently set to automatically apply 5-fold calculation instead of 2 to account for the initial dilution. This was resolved by reporting the sample result with the correct dilution factor applied by manual calculation.

### Quality Control

All quality control audits were within the CRL's limits except for some sample duplicate and matrix spike.

Results for Samples 1805005-21(C1b), and -41(C11a) were flagged as estimated, due sample matrix interferences. These samples were qualified "J" (The identification of the analyte is acceptable; the reported value is an estimate). Sample 1805005-31(C7b) matrix spike recovery is invalid due to concentration been diluted out.

Samples 1805007-08 (D7a), -11(D8b), -21 (E1b), -27(E3b) and -37(E8b) had been flagged as estimated, due sample matrix interferences. These samples were qualified "J" (The identification of the analyte is acceptable; the reported value is an estimate).



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Water Division, WECA Region 5  
77 West Jackson Boulevard  
Chicago IL, 60604

Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

## Analysis Case Narrative

### General Information

A total of 98 water samples, to be analyzed for Total Kjeldahl Nitrogen (TKN), were received at the Chicago Regional Laboratory on May 2 and 4, 2018, with work order 1805005 and 1805007 respectively. The samples were digested and analyzed using CRL SOP AIG035B, Version #7 (based on EPA method 351.2). All holding times were met. The designated analyst for these samples is Nidia Fuentes. Nidia can be reached at 312-353-9079.

### Sample Analysis and Results

The data reported herein meets any laboratory specifications referenced in the sampling Quality Assurance Project Plan (QAPP) *FINAL\_2018 GW Sampling Plan4\_27\_2018*, and the limits referenced in CRL SOP AIG035B Version #7 (based on EPA method 351.2).

Samples for work order 1805005 were initial diluted 2-fold prior to digestion. This was needed to avoid exceeding the digestion reagent capacity and determination limits. Exceptions of field blanks and samples 1805005-53 and -54. The Gallery instrument software was inadvertently set to automatically apply 5-fold calculation instead of 2 to account for the initial dilution. This was resolved by reporting the sample result with the correct dilution factor applied by manual calculation.

### Quality Control

All quality control audits were within the CRL limits, with the exceptions of some sample duplicate or matrix spikes.

Sample results for 1805005-14 (B2a), -21(C1b), -31(C7b) and -41(C11a) were flagged as estimated due sample matrix interferences. These results were qualified "J" (The identification of the analyte is acceptable; the reported value is an estimate).

Sample results for 1805007-08 (D7a Dup) and -11(D8b) were flagged as estimated due sample matrix interferences. These results were flagged "J" (The identification of the analyte is acceptable; the reported value is an estimate).



# Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605  
Phone:(312)353-8370 Fax:(312)886-2591

## WORK ORDER

Printed: 5/3/2018 3:33:25PM

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
Project Number: **[none]**

### Report To:

Cheryl Burdett  
Water Division, WECA Region 5

77 West Jackson Boulevard  
Chicago, IL 60604

Phone: (312) 886-1463  
Fax: (312) 886-2001

Date Due: Jun-04-18 15:00 (32 day TAT)

Received By: Colin Breslin

Date Received: May-02-18 09:55

Logged In By: Robert Snyder

Date Logged In: May-03-18 09:30

### Samples Received at:

Sample tags/labels **Yes**  
Seals Intact **Yes**  
Received on ice **Yes**  
Paperwork Included **Yes**

### Work Order Comments:

Anions: Chloride and nitrate as NO3  
Full List metals

Sample ID: **1805005-01** Sampled: **Apr-30-18 07:19** Matrix: **Water**

Sample Name: **A1a**

Sample Location/Comments: **1st Street**

### Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 07:19	pH = 2
Anions by IC	28	May-28-18 07:19	pH = 7
Metals ICP-AES (w)	180	Oct-27-18 07:19	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 07:19	pH = 2
Solids, TDS	7	May-07-18 07:19	pH = 7
TKN DA	28	May-28-18 07:19	pH = 2
TOC	28	May-28-18 07:19	pH = 2
Total Phosphorus DA	28	May-28-18 07:19	pH = 2

Sample ID: **1805005-02** Sampled: **Apr-30-18 07:32** Matrix: **Water**

Sample Name: **A1b**

Sample Location/Comments: **1st Street**

### Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 07:32	pH = 2
Anions by IC	28	May-28-18 07:32	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 07:32	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 07:32	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-02**      Sampled: **Apr-30-18 07:32**      Matrix: **Water**

Sample Name: **A1b**

Sample Location/Comments: **1st Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Solids, TDS	7	May-07-18 07:32	pH = 5
TKN DA	28	May-28-18 07:32	pH = 2
TOC	28	May-28-18 07:32	pH = 2
Total Phosphorus DA	28	May-28-18 07:32	pH = 2

Sample ID: **1805005-03**      Sampled: **Apr-30-18 08:15**      Matrix: **Water**

Sample Name: **A2a**

Sample Location/Comments: **22nd Avenue North**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 08:15	pH = 2
Anions by IC	28	May-28-18 08:15	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 08:15	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 08:15	pH = 2
Solids, TDS	7	May-07-18 08:15	pH = 6
TKN DA	28	May-28-18 08:15	pH = 2
TOC	28	May-28-18 08:15	pH = 2
Total Phosphorus DA	28	May-28-18 08:15	pH = 2

Sample ID: **1805005-04**      Sampled: **Apr-30-18 08:24**      Matrix: **Water**

Sample Name: **A2b**

Sample Location/Comments: **22nd Avenue North**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 08:24	pH = 2
Anions by IC	28	May-28-18 08:24	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 08:24	pH = 5
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 08:24	pH = 2
Solids, TDS	7	May-07-18 08:24	pH = 6
TKN DA	28	May-28-18 08:24	pH = 2
TOC	28	May-28-18 08:24	pH = 2
Total Phosphorus DA	28	May-28-18 08:24	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-05** Sampled: **Apr-30-18 09:06** Matrix: **Water** *QC Source Sample MS/MSD*

Sample Name: **A3a** Sample Location/Comments: **2nd Street**

Sample Comments: **MS/MSD**

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:06	pH = 2
Anions by IC	28	May-28-18 09:06	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 09:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:06	pH = 2
Solids, TDS	7	May-07-18 09:06	pH = 6
TKN DA	28	May-28-18 09:06	pH = 2
TOC	28	May-28-18 09:06	pH = 2
Total Phosphorus DA	28	May-28-18 09:06	pH = 2

Sample ID: **1805005-06** Sampled: **Apr-30-18 09:14** Matrix: **Water**

Sample Name: **A3b** Sample Location/Comments: **2nd Street**

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:14	pH = 2
Anions by IC	28	May-28-18 09:14	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 09:14	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:14	pH = 2
Solids, TDS	7	May-07-18 09:14	pH = 6
TKN DA	28	May-28-18 09:14	pH = 2
TOC	28	May-28-18 09:14	pH = 2
Total Phosphorus DA	28	May-28-18 09:14	pH = 2

Sample ID: **1805005-07** Sampled: **Apr-30-18 09:38** Matrix: **Water**

Sample Name: **A4 Equip** Sample Location/Comments: **Cranberry Rock Road**

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:38	pH = 2
Anions by IC	28	May-28-18 09:38	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 09:38	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:38	pH = 2
Solids, TDS	7	May-07-18 09:38	pH = 5
TKN DA	28	May-28-18 09:38	pH = 2
TOC	28	May-28-18 09:38	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: 1805005-07 Sampled: Apr-30-18 09:38 Matrix: Water

Sample Name: A4 Equip Sample Location/Comments: Cranberry Rock Road

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-28-18 09:38	pH = 2

Sample ID: 1805005-08 Sampled: Apr-30-18 09:06 Matrix: Water

Sample Name: A3a (Dup) Sample Location/Comments: 2nd Street

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:06	pH = 2
Anions by IC	28	May-28-18 09:06	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 09:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:06	pH = 2
Solids, TDS	7	May-07-18 09:06	pH = 6
TKN DA	28	May-28-18 09:06	pH = 2
TOC	28	May-28-18 09:06	pH = 2
Total Phosphorus DA	28	May-28-18 09:06	pH = 2

Sample ID: 1805005-09 Sampled: Apr-30-18 09:49 Matrix: Water

Sample Name: FB1 Sample Location/Comments: Cranberry Rock Road

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:49	pH = 2
Anions by IC	28	May-28-18 09:49	pH = 4
Metals ICP-AES (w)	180	Oct-27-18 09:49	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:49	pH = 2
Solids, TDS	7	May-07-18 09:49	pH = 4
TKN DA	28	May-28-18 09:49	pH = 2
TOC	28	May-28-18 09:49	pH = 2
Total Phosphorus DA	28	May-28-18 09:49	pH = 2

Sample ID: 1805005-10 Sampled: Apr-30-18 09:58 Matrix: Water

Sample Name: A4a Sample Location/Comments: Cranberry Rock Road

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:58	pH = 2
Anions by IC	28	May-28-18 09:58	pH = 6



1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-10** Sampled: **Apr-30-18 09:58** Matrix: **Water**

Sample Name: **A4a** Sample Location/Comments: **Cranberry Rock Road**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-27-18 09:58	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:58	pH = 2
Solids, TDS	7	May-07-18 09:58	pH = 6
TKN DA	28	May-28-18 09:58	pH = 2
TOC	28	May-28-18 09:58	pH = 2
Total Phosphorus DA	28	May-28-18 09:58	pH = 2

Sample ID: **1805005-11** Sampled: **Apr-30-18 10:09** Matrix: **Water**

Sample Name: **A4b** Sample Location/Comments: **Cranberry Rock Road**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 10:09	pH = 2
Anions by IC	28	May-28-18 10:09	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 10:09	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 10:09	pH = 2
Solids, TDS	7	May-07-18 10:09	pH = 5
TKN DA	28	May-28-18 10:09	pH = 2
TOC	28	May-28-18 10:09	pH = 2
Total Phosphorus DA	28	May-28-18 10:09	pH = 2

Sample ID: **1805005-12** Sampled: **Apr-30-18 10:51** Matrix: **Water**

Sample Name: **B1a** Sample Location/Comments: **20th Avenue**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 10:51	pH = 3
Anions by IC	28	May-28-18 10:51	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 10:51	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 10:51	pH = 3
Solids, TDS	7	May-07-18 10:51	pH = 5
TKN DA	28	May-28-18 10:51	pH = 3
TOC	28	May-28-18 10:51	pH = 3
Total Phosphorus DA	28	May-28-18 10:51	pH = 3

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-13** Sampled: **Apr-30-18 10:58** Matrix: **Water**

Sample Name: **B1b** Sample Location/Comments: **20th Avenue**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 10:58	pH = 2
Anions by IC	28	May-28-18 10:58	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 10:58	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 10:58	pH = 2
Solids, TDS	7	May-07-18 10:58	pH = 5
TKN DA	28	May-28-18 10:58	pH = 2
TOC	28	May-28-18 10:58	pH = 2
Total Phosphorus DA	28	May-28-18 10:58	pH = 2

Sample ID: **1805005-14** Sampled: **Apr-30-18 11:40** Matrix: **Water**

Sample Name: **B2a** Sample Location/Comments: **3rd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 11:40	pH = 2
Anions by IC	28	May-28-18 11:40	pH = 7
Metals ICP-AES (w)	180	Oct-27-18 11:40	pH = 4
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 11:40	pH = 2
Solids, TDS	7	May-07-18 11:40	pH = 7
TKN DA	28	May-28-18 11:40	pH = 2
TOC	28	May-28-18 11:40	pH = 2
Total Phosphorus DA	28	May-28-18 11:40	pH = 2

Sample ID: **1805005-15** Sampled: **Apr-30-18 11:48** Matrix: **Water**

Sample Name: **B2b** Sample Location/Comments: **3rd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 11:48	pH = 2
Anions by IC	28	May-28-18 11:48	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 11:48	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 11:48	pH = 2
Solids, TDS	7	May-07-18 11:48	pH = 5
TKN DA	28	May-28-18 11:48	pH = 2
TOC	28	May-28-18 11:48	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-15** Sampled: **Apr-30-18 11:48** Matrix: **Water**

Sample Name: **B2b**

Sample Location/Comments: **3rd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-28-18 11:48	pH = 2

Sample ID: **1805005-16** Sampled: **Apr-30-18 12:29** Matrix: **Water**

Sample Name: **B3a**

Sample Location/Comments: **3rd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 12:29	pH = 2
Anions by IC	28	May-28-18 12:29	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 12:29	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 12:29	pH = 2
Solids, TDS	7	May-07-18 12:29	pH = 6
TKN DA	28	May-28-18 12:29	pH = 2
TOC	28	May-28-18 12:29	pH = 2
Total Phosphorus DA	28	May-28-18 12:29	pH = 2

Sample ID: **1805005-17** Sampled: **Apr-30-18 12:36** Matrix: **Water**

Sample Name: **B3b**

Sample Location/Comments: **3rd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 12:36	pH = 2
Anions by IC	28	May-28-18 12:36	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 12:36	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 12:36	pH = 2
Solids, TDS	7	May-07-18 12:36	pH = 5
TKN DA	28	May-28-18 12:36	pH = 2
TOC	28	May-28-18 12:36	pH = 2
Total Phosphorus DA	28	May-28-18 12:36	pH = 2

Sample ID: **1805005-18** Sampled: **Apr-30-18 13:10** Matrix: **Water**

Sample Name: **B4a**

Sample Location/Comments: **3rd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 13:10	pH = 2
Anions by IC	28	May-28-18 13:10	pH = 5

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-18**      Sampled: **Apr-30-18 13:10**      Matrix: **Water**

Sample Name: **B4a**

Sample Location/Comments: **3rd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-27-18 13:10	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 13:10	pH = 2
Solids, TDS	7	May-07-18 13:10	pH = 5
TKN DA	28	May-28-18 13:10	pH = 2
TOC	28	May-28-18 13:10	pH = 2
Total Phosphorus DA	28	May-28-18 13:10	pH = 2

Sample ID: **1805005-19**      Sampled: **Apr-30-18 13:41**      Matrix: **Water**

Sample Name: **B4b**

Sample Location/Comments: **3rd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 13:41	pH = 2
Anions by IC	28	May-28-18 13:41	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 13:41	pH = 4
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 13:41	pH = 2
Solids, TDS	7	May-07-18 13:41	pH = 5
TKN DA	28	May-28-18 13:41	pH = 2
TOC	28	May-28-18 13:41	pH = 2
Total Phosphorus DA	28	May-28-18 13:41	pH = 2

Sample ID: **1805005-20**      Sampled: **Apr-30-18 15:02**      Matrix: **Water**

Sample Name: **C1a**

Sample Location/Comments: **2nd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 15:02	pH = 2
Anions by IC	28	May-28-18 15:02	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 15:02	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 15:02	pH = 2
Solids, TDS	7	May-07-18 15:02	pH = 5
TKN DA	28	May-28-18 15:02	pH = 2
TOC	28	May-28-18 15:02	pH = 2
Total Phosphorus DA	28	May-28-18 15:02	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-21**      Sampled: **Apr-30-18 15:27**      Matrix: **Water**

Sample Name: **C1b**      Sample Location/Comments: **2nd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 15:27	pH = 2
Anions by IC	28	May-28-18 15:27	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 15:27	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 15:27	pH = 2
Solids, TDS	7	May-07-18 15:27	pH = 5
TKN DA	28	May-28-18 15:27	pH = 2
TOC	28	May-28-18 15:27	pH = 2
Total Phosphorus DA	28	May-28-18 15:27	pH = 2

Sample ID: **1805005-22**      Sampled: **Apr-30-18 16:06**      Matrix: **Water**

Sample Name: **C2a**      Sample Location/Comments: **Nelson Road**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 16:06	pH = 2
Anions by IC	28	May-28-18 16:06	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 16:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 16:06	pH = 2
Solids, TDS	7	May-07-18 16:06	pH = 5
TKN DA	28	May-28-18 16:06	pH = 2
TOC	28	May-28-18 16:06	pH = 2
Total Phosphorus DA	28	May-28-18 16:06	pH = 2

Sample ID: **1805005-23**      Sampled: **Apr-30-18 16:14**      Matrix: **Water**

Sample Name: **C2b**      Sample Location/Comments: **Nelson Road**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 16:14	pH = 2
Anions by IC	28	May-28-18 16:14	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 16:14	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 16:14	pH = 2
Solids, TDS	7	May-07-18 16:14	pH = 5
TKN DA	28	May-28-18 16:14	pH = 2
TOC	28	May-28-18 16:14	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-23** Sampled: **Apr-30-18 16:14** Matrix: **Water**

Sample Name: **C2b** Sample Location/Comments: **Nelson Road**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-28-18 16:14	pH = 2

Sample ID: **1805005-24** Sampled: **Apr-30-18 14:16** Matrix: **Water**

Sample Name: **C3a** Sample Location/Comments: **3rd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 14:16	pH = 2
Anions by IC	28	May-28-18 14:16	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 14:16	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 14:16	pH = 2
Solids, TDS	7	May-07-18 14:16	pH = 5
TKN DA	28	May-28-18 14:16	pH = 2
TOC	28	May-28-18 14:16	pH = 2
Total Phosphorus DA	28	May-28-18 14:16	pH = 2

Sample ID: **1805005-25** Sampled: **Apr-30-18 14:26** Matrix: **Water**

Sample Name: **C3b** Sample Location/Comments: **3rd Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 14:26	pH = 2
Anions by IC	28	May-28-18 14:26	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 14:26	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 14:26	pH = 2
Solids, TDS	7	May-07-18 14:26	pH = 5
TKN DA	28	May-28-18 14:26	pH = 2
TOC	28	May-28-18 14:26	pH = 2
Total Phosphorus DA	28	May-28-18 14:26	pH = 2

Sample ID: **1805005-26** Sampled: **May-01-18 06:29** Matrix: **Water**

Sample Name: **C5Aa** Sample Location/Comments: **CR G (Nelson Road)**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 06:29	pH = 2
Anions by IC	28	May-29-18 06:29	pH = 5

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-26** Sampled: **May-01-18 06:29** Matrix: **Water**

Sample Name: **C5Aa** Sample Location/Comments: **CR G (Nelson Road)**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 06:29	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 06:29	pH = 2
Solids, TDS	7	May-08-18 06:29	pH = 5
TKN DA	28	May-29-18 06:29	pH = 2
TOC	28	May-29-18 06:29	pH = 2
Total Phosphorus DA	28	May-29-18 06:29	pH = 2

Sample ID: **1805005-27** Sampled: **May-01-18 06:43** Matrix: **Water**

Sample Name: **C5Ab** Sample Location/Comments: **CR G (Nelson Road)**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 06:43	pH = 2
Anions by IC	28	May-29-18 06:43	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 06:43	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 06:43	pH = 2
Solids, TDS	7	May-08-18 06:43	pH = 5
TKN DA	28	May-29-18 06:43	pH = 2
TOC	28	May-29-18 06:43	pH = 2
Total Phosphorus DA	28	May-29-18 06:43	pH = 2

Sample ID: **1805005-28** Sampled: **May-01-18 07:06** Matrix: **Water**

Sample Name: **C6a** Sample Location/Comments: **CR G (Nelson Road)**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:06	pH = 2
Anions by IC	28	May-29-18 07:06	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 07:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:06	pH = 2
Solids, TDS	7	May-08-18 07:06	pH = 6
TKN DA	28	May-29-18 07:06	pH = 2
TOC	28	May-29-18 07:06	pH = 2
Total Phosphorus DA	28	May-29-18 07:06	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-29** Sampled: **May-01-18 07:15** Matrix: **Water**

Sample Name: **C6b** Sample Location/Comments: **CR G (Nelson Road)**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:15	pH = 3
Anions by IC	28	May-29-18 07:15	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 07:15	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:15	pH = 3
Solids, TDS	7	May-08-18 07:15	pH = 5
TKN DA	28	May-29-18 07:15	pH = 3
TOC	28	May-29-18 07:15	pH = 3
Total Phosphorus DA	28	May-29-18 07:15	pH = 3

Sample ID: **1805005-30** Sampled: **May-01-18 07:48** Matrix: **Water**

Sample Name: **C7a** Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:48	pH = 2
Anions by IC	28	May-29-18 07:48	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 07:48	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:48	pH = 2
Solids, TDS	7	May-08-18 07:48	pH = 6
TKN DA	28	May-29-18 07:48	pH = 2
TOC	28	May-29-18 07:48	pH = 2
Total Phosphorus DA	28	May-29-18 07:48	pH = 2

Sample ID: **1805005-31** Sampled: **May-01-18 08:02** Matrix: **Water**

Sample Name: **C7b** Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:02	pH = 2
Anions by IC	28	May-29-18 08:02	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 08:02	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:02	pH = 2
Solids, TDS	7	May-08-18 08:02	pH = 5
TKN DA	28	May-29-18 08:02	pH = 2
TOC	28	May-29-18 08:02	pH = 2



1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-31** Sampled: **May-01-18 08:02** Matrix: **Water**

Sample Name: **C7b**

Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-29-18 08:02	pH = 2

Sample ID: **1805005-32** Sampled: **May-01-18 07:39** Matrix: **Water**

Sample Name: **FB2**

Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:39	pH = 2
Anions by IC	28	May-29-18 07:39	pH = 4
Metals ICP-AES (w)	180	Oct-28-18 07:39	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:39	pH = 2
Solids, TDS	7	May-08-18 07:39	pH = 4
TKN DA	28	May-29-18 07:39	pH = 2
TOC	28	May-29-18 07:39	pH = 2
Total Phosphorus DA	28	May-29-18 07:39	pH = 2

Sample ID: **1805005-33** Sampled: **May-01-18 07:38** Matrix: **Water**

Sample Name: **C7 equip**

Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:38	pH = 2
Anions by IC	28	May-29-18 07:38	pH = 4
Metals ICP-AES (w)	180	Oct-28-18 07:38	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:38	pH = 2
Solids, TDS	7	May-08-18 07:38	pH = 4
TKN DA	28	May-29-18 07:38	pH = 2
TOC	28	May-29-18 07:38	pH = 2
Total Phosphorus DA	28	May-29-18 07:38	pH = 2

Sample ID: **1805005-34** Sampled: **May-01-18 08:02** Matrix: **Water**

Sample Name: **C7 Dup**

Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:02	pH = 2
Anions by IC	28	May-29-18 08:02	pH = 5

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-34** Sampled: **May-01-18 08:02** Matrix: **Water**

Sample Name: **C7 Dup**

Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 08:02	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:02	pH = 2
Solids, TDS	7	May-08-18 08:02	pH = 5
TKN DA	28	May-29-18 08:02	pH = 2
TOC	28	May-29-18 08:02	pH = 2
Total Phosphorus DA	28	May-29-18 08:02	pH = 2

Sample ID: **1805005-35** Sampled: **May-01-18 08:35** Matrix: **Water**

Sample Name: **C8a**

Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:35	pH = 2
Anions by IC	28	May-29-18 08:35	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 08:35	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:35	pH = 2
Solids, TDS	7	May-08-18 08:35	pH = 5
TKN DA	28	May-29-18 08:35	pH = 2
TOC	28	May-29-18 08:35	pH = 2
Total Phosphorus DA	28	May-29-18 08:35	pH = 2

Sample ID: **1805005-36** Sampled: **May-01-18 08:42** Matrix: **Water**

Sample Name: **C8b**

Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:42	pH = 2
Anions by IC	28	May-29-18 08:42	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 08:42	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:42	pH = 2
Solids, TDS	7	May-08-18 08:42	pH = 5
TKN DA	28	May-29-18 08:42	pH = 2
TOC	28	May-29-18 08:42	pH = 2
Total Phosphorus DA	28	May-29-18 08:42	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-37** Sampled: **May-01-18 10:00** Matrix: **Water**

Sample Name: **C9a**

Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 10:00	pH = 2
Anions by IC	28	May-29-18 10:00	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 10:00	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 10:00	pH = 2
Solids, TDS	7	May-08-18 10:00	pH = 5
TKN DA	28	May-29-18 10:00	pH = 2
TOC	28	May-29-18 10:00	pH = 2
Total Phosphorus DA	28	May-29-18 10:00	pH = 2

Sample ID: **1805005-38** Sampled: **May-01-18 10:21** Matrix: **Water**

Sample Name: **C9b**

Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 10:21	pH = 2
Anions by IC	28	May-29-18 10:21	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 10:21	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 10:21	pH = 2
Solids, TDS	7	May-08-18 10:21	pH = 5
TKN DA	28	May-29-18 10:21	pH = 2
TOC	28	May-29-18 10:21	pH = 2
Total Phosphorus DA	28	May-29-18 10:21	pH = 2

Sample ID: **1805005-39** Sampled: **May-01-18 11:05** Matrix: **Water**

Sample Name: **C10a**

Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:05	pH = 2
Anions by IC	28	May-29-18 11:05	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 11:05	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:05	pH = 2
Solids, TDS	7	May-08-18 11:05	pH = 6
TKN DA	28	May-29-18 11:05	pH = 2
TOC	28	May-29-18 11:05	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-39** Sampled: **May-01-18 11:05** Matrix: **Water**

Sample Name: **C10a** Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-29-18 11:05	pH = 2

Sample ID: **1805005-40** Sampled: **May-01-18 11:12** Matrix: **Water**

Sample Name: **C10b** Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:12	pH = 2
Anions by IC	28	May-29-18 11:12	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 11:12	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:12	pH = 2
Solids, TDS	7	May-08-18 11:12	pH = 5
TKN DA	28	May-29-18 11:12	pH = 2
TOC	28	May-29-18 11:12	pH = 2
Total Phosphorus DA	28	May-29-18 11:12	pH = 2

Sample ID: **1805005-41** Sampled: **May-01-18 11:46** Matrix: **Water**

Sample Name: **C11a** Sample Location/Comments: **20th Avenue**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:46	pH = 3
Anions by IC	28	May-29-18 11:46	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 11:46	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:46	pH = 3
Solids, TDS	7	May-08-18 11:46	pH = 6
TKN DA	28	May-29-18 11:46	pH = 3
TOC	28	May-29-18 11:46	pH = 3
Total Phosphorus DA	28	May-29-18 11:46	pH = 3

Sample ID: **1805005-42** Sampled: **May-01-18 11:52** Matrix: **Water**

Sample Name: **C11b** Sample Location/Comments: **20th Avenue**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:52	pH = 2
Anions by IC	28	May-29-18 11:52	pH = 5

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-42** Sampled: **May-01-18 11:52** Matrix: **Water**

Sample Name: **C11b**

Sample Location/Comments: **20th Avenue**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 11:52	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:52	pH = 2
Solids, TDS	7	May-08-18 11:52	pH = 5
TKN DA	28	May-29-18 11:52	pH = 2
TOC	28	May-29-18 11:52	pH = 2
Total Phosphorus DA	28	May-29-18 11:52	pH = 2

Sample ID: **1805005-43** Sampled: **May-01-18 12:41** Matrix: **Water**

Sample Name: **C12a**

Sample Location/Comments: **19th Avenue**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 12:41	pH = 2
Anions by IC	28	May-29-18 12:41	pH = 7
Metals ICP-AES (w)	180	Oct-28-18 12:41	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 12:41	pH = 2
Solids, TDS	7	May-08-18 12:41	pH = 7
TKN DA	28	May-29-18 12:41	pH = 2
TOC	28	May-29-18 12:41	pH = 2
Total Phosphorus DA	28	May-29-18 12:41	pH = 2

Sample ID: **1805005-44** Sampled: **May-01-18 12:47** Matrix: **Water**

Sample Name: **C12b**

Sample Location/Comments: **19th Avenue**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 12:47	pH = 2
Anions by IC	28	May-29-18 12:47	pH = 7
Metals ICP-AES (w)	180	Oct-28-18 12:47	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 12:47	pH = 2
Solids, TDS	7	May-08-18 12:47	pH = 7
TKN DA	28	May-29-18 12:47	pH = 2
TOC	28	May-29-18 12:47	pH = 2
Total Phosphorus DA	28	May-29-18 12:47	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-45** Sampled: **May-01-18 13:30** Matrix: **Water**

Sample Name: **C13a** Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 13:30	pH = 3
Anions by IC	28	May-29-18 13:30	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 13:30	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 13:30	pH = 3
Solids, TDS	7	May-08-18 13:30	pH = 6
TKN DA	28	May-29-18 13:30	pH = 3
TOC	28	May-29-18 13:30	pH = 3
Total Phosphorus DA	28	May-29-18 13:30	pH = 3

Sample ID: **1805005-46** Sampled: **May-01-18 13:39** Matrix: **Water**

Sample Name: **C13b** Sample Location/Comments: **4th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 13:39	pH = 2
Anions by IC	28	May-29-18 13:39	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 13:39	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 13:39	pH = 2
Solids, TDS	7	May-08-18 13:39	pH = 5
TKN DA	28	May-29-18 13:39	pH = 2
TOC	28	May-29-18 13:39	pH = 2
Total Phosphorus DA	28	May-29-18 13:39	pH = 2

Sample ID: **1805005-47** Sampled: **May-01-18 14:19** Matrix: **Water**

Sample Name: **D1a** Sample Location/Comments: **5th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 14:19	pH = 2
Anions by IC	28	May-29-18 14:19	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 14:19	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 14:19	pH = 2
Solids, TDS	7	May-08-18 14:19	pH = 6
TKN DA	28	May-29-18 14:19	pH = 2
TOC	28	May-29-18 14:19	pH = 2

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: 1805005-47 Sampled: May-01-18 14:19 Matrix: Water

Sample Name: D1a Sample Location/Comments: 5th Street

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-29-18 14:19	pH = 2

Sample ID: 1805005-48 Sampled: May-01-18 14:26 Matrix: Water

Sample Name: D1b Sample Location/Comments: 5th Street

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 14:26	pH = 3
Anions by IC	28	May-29-18 14:26	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 14:26	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 14:26	pH = 3
Solids, TDS	7	May-08-18 14:26	pH = 5
TKN DA	28	May-29-18 14:26	pH = 3
TOC	28	May-29-18 14:26	pH = 3
Total Phosphorus DA	28	May-29-18 14:26	pH = 3

Sample ID: 1805005-49 Sampled: May-01-18 15:00 Matrix: Water

Sample Name: D2a Sample Location/Comments: 5th Street

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:00	pH = 3
Anions by IC	28	May-29-18 15:00	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 15:00	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:00	pH = 3
Solids, TDS	7	May-08-18 15:00	pH = 6
TKN DA	28	May-29-18 15:00	pH = 3
TOC	28	May-29-18 15:00	pH = 3
Total Phosphorus DA	28	May-29-18 15:00	pH = 3

Sample ID: 1805005-50 Sampled: May-01-18 15:06 Matrix: Water

Sample Name: D2b Sample Location/Comments: 5th Street

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:06	pH = 2
Anions by IC	28	May-29-18 15:06	pH = 6

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-50** Sampled: **May-01-18 15:06** Matrix: **Water**

Sample Name: **D2b** Sample Location/Comments: **5th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 15:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:06	pH = 2
Solids, TDS	7	May-08-18 15:06	pH = 6
TKN DA	28	May-29-18 15:06	pH = 2
TOC	28	May-29-18 15:06	pH = 2
Total Phosphorus DA	28	May-29-18 15:06	pH = 2

Sample ID: **1805005-51** Sampled: **May-01-18 15:41** Matrix: **Water**

Sample Name: **D3a** Sample Location/Comments: **5th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:41	pH = 2
Anions by IC	28	May-29-18 15:41	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 15:41	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:41	pH = 2
Solids, TDS	7	May-08-18 15:41	pH = 6
TKN DA	28	May-29-18 15:41	pH = 2
TOC	28	May-29-18 15:41	pH = 2
Total Phosphorus DA	28	May-29-18 15:41	pH = 2

Sample ID: **1805005-52** Sampled: **May-01-18 15:48** Matrix: **Water**

Sample Name: **D3b** Sample Location/Comments: **5th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:48	pH = 2
Anions by IC	28	May-29-18 15:48	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 15:48	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:48	pH = 2
Solids, TDS	7	May-08-18 15:48	pH = 5
TKN DA	28	May-29-18 15:48	pH = 2
TOC	28	May-29-18 15:48	pH = 2
Total Phosphorus DA	28	May-29-18 15:48	pH = 2



## WORK ORDER

Printed: 5/3/2018 3:33:25PM

1805005

## US EPA Region 5 Chicago Regional Laboratory

Client: **Water Division, WECA Region 5**  
 Project: **Central Sands**

Project Manager: **Angela Ockrassa Davis**  
 Project Number: **[none]**

Sample ID: **1805005-53**      Sampled: **May-01-18 16:19**      Matrix: **Water**

Sample Name: **D4a**

Sample Location/Comments: **5th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 16:19	pH = 2
Anions by IC	28	May-29-18 16:19	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 16:19	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 16:19	pH = 2
Solids, TDS	7	May-08-18 16:19	pH = 6
TKN DA	28	May-29-18 16:19	pH = 2
TOC	28	May-29-18 16:19	pH = 2
Total Phosphorus DA	28	May-29-18 16:19	pH = 2

Sample ID: **1805005-54**      Sampled: **May-01-18 16:26**      Matrix: **Water**

Sample Name: **D4b**

Sample Location/Comments: **5th Street**

## Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 16:26	pH = 2
Anions by IC	28	May-29-18 16:26	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 16:26	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 16:26	pH = 2
Solids, TDS	7	May-08-18 16:26	pH = 5
TKN DA	28	May-29-18 16:26	pH = 2
TOC	28	May-29-18 16:26	pH = 2
Total Phosphorus DA	28	May-29-18 16:26	pH = 2

WORK ORDER MEMO: NCR 14118

PROJECT COMMENTS: Anions: Chloride, fluoride, bromide, sulfate.  
 Full List metals

**REVIEWED**

**By Amanda Wroble at 3:35 pm, May 03, 2018**

Reviewed By

Date

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ED\_004625A\_00002438-00025



Environmental Protection Agency Region 5  
**Chicago Regional Laboratory**

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Water Division, WECA Region 5  
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Chicago IL, 60604

Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Phosphorus, Colorimetric, EPA 365.4 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**A1a (1805005-01) Matrix: Water Sampled: Apr-30-18 07:19 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	4.52		0.08	0.30	mg/L	2	B18E028	May-10-18	May-11-18

**A1b (1805005-02) Matrix: Water Sampled: Apr-30-18 07:32 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	3.22		0.08	0.30	mg/L	2	B18E028	May-10-18	May-11-18

**A2a (1805005-03) Matrix: Water Sampled: Apr-30-18 08:15 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	3.37		0.08	0.30	mg/L	2	B18E028	May-10-18	May-11-18

**A2b (1805005-04) Matrix: Water Sampled: Apr-30-18 08:24 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	7.94		0.80	3.00	mg/L	20	B18E028	May-10-18	May-11-18

**A3a (1805005-05) Matrix: Water Sampled: Apr-30-18 09:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	3.68		0.08	0.30	mg/L	2	B18E028	May-10-18	May-11-18

**A3b (1805005-06) Matrix: Water Sampled: Apr-30-18 09:14 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	4.59		0.08	0.30	mg/L	2	B18E028	May-10-18	May-11-18

**A4 Equip (1805005-07) Matrix: Water Sampled: Apr-30-18 09:38 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	U		0.04	0.15	mg/L	1	B18E028	May-10-18	May-11-18

**A3a (Dup) (1805005-08) Matrix: Water Sampled: Apr-30-18 09:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	1.62		0.08	0.30	mg/L	2	B18E028	May-10-18	May-11-18



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Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Phosphorus, Colorimetric, EPA 365.4 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**FB1 (1805005-09)**

**Matrix: Water**

**Sampled: Apr-30-18 09:49**

**Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	U		0.04	0.15	mg/L	1	B18E028	May-10-18	May-11-18

**A4a (1805005-10)**

**Matrix: Water**

**Sampled: Apr-30-18 09:58**

**Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.21		0.08	0.30	mg/L	2	B18E028	May-10-18	May-11-18

**A4b (1805005-11)**

**Matrix: Water**

**Sampled: Apr-30-18 10:09**

**Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.37		0.08	0.30	mg/L	2	B18E028	May-10-18	May-11-18

**B1a (1805005-12)**

**Matrix: Water**

**Sampled: Apr-30-18 10:51**

**Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	4.28		0.08	0.30	mg/L	2	B18E028	May-10-18	May-11-18

**B1b (1805005-13)**

**Matrix: Water**

**Sampled: Apr-30-18 10:58**

**Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	6.53		0.80	3.00	mg/L	20	B18E028	May-10-18	May-11-18

**B2a (1805005-14)**

**Matrix: Water**

**Sampled: Apr-30-18 11:40**

**Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.93		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**B2b (1805005-15)**

**Matrix: Water**

**Sampled: Apr-30-18 11:48**

**Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.57		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**B3a (1805005-16)**

**Matrix: Water**

**Sampled: Apr-30-18 12:29**

**Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	4.54		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18



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Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Phosphorus, Colorimetric, EPA 365.4 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**B3b (1805005-17) Matrix: Water Sampled: Apr-30-18 12:36 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	5.29		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**B4a (1805005-18) Matrix: Water Sampled: Apr-30-18 13:10 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.63		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**B4b (1805005-19) Matrix: Water Sampled: Apr-30-18 13:41 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	5.11		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**C1a (1805005-20) Matrix: Water Sampled: Apr-30-18 15:02 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	5.57		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**C1b (1805005-21) Matrix: Water Sampled: Apr-30-18 15:27 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	9.13	J	0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**C2a (1805005-22) Matrix: Water Sampled: Apr-30-18 16:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.60		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**C2b (1805005-23) Matrix: Water Sampled: Apr-30-18 16:14 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	4.87		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**C3a (1805005-24) Matrix: Water Sampled: Apr-30-18 14:16 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.88		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18



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**Chicago Regional Laboratory**

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Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Phosphorus, Colorimetric, EPA 365.4 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**C3b (1805005-25) Matrix: Water Sampled: Apr-30-18 14:26 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.72		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**C5Aa (1805005-26) Matrix: Water Sampled: May-01-18 06:29 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	3.85		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**C5Ab (1805005-27) Matrix: Water Sampled: May-01-18 06:43 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	3.52		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**C6a (1805005-28) Matrix: Water Sampled: May-01-18 07:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	1.97		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**C6b (1805005-29) Matrix: Water Sampled: May-01-18 07:15 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	U		0.80	3.00	mg/L	20	B18E031	May-11-18	May-23-18

**C7a (1805005-30) Matrix: Water Sampled: May-01-18 07:48 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	U		0.08	0.30	mg/L	2	B18E031	May-11-18	May-23-18

**C7b (1805005-31) Matrix: Water Sampled: May-01-18 08:02 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	1.47	J	0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**FB2 (1805005-32) Matrix: Water Sampled: May-01-18 07:39 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	U		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18



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Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Phosphorus, Colorimetric, EPA 365.4 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**C7 equip (1805005-33)**

**Matrix: Water      Sampled: May-01-18 07:38      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	U		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

**C7b Dup (1805005-34)**

**Matrix: Water      Sampled: May-01-18 08:02      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	1.40		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**C8a (1805005-35)**

**Matrix: Water      Sampled: May-01-18 08:35      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	8.84		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**C8b (1805005-36)**

**Matrix: Water      Sampled: May-01-18 08:42      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.50		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**C9a (1805005-37)**

**Matrix: Water      Sampled: May-01-18 10:00      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	1.16		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**C9b (1805005-38)**

**Matrix: Water      Sampled: May-01-18 10:21      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.16		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**C10a (1805005-39)**

**Matrix: Water      Sampled: May-01-18 11:05      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	4.76		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**C10b (1805005-40)**

**Matrix: Water      Sampled: May-01-18 11:12      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	4.12		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18



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Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Phosphorus, Colorimetric, EPA 365.4 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**C11a (1805005-41) Matrix: Water Sampled: May-01-18 11:46 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.64	J	0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**C11b (1805005-42) Matrix: Water Sampled: May-01-18 11:52 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	3.90		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**C12a (1805005-43) Matrix: Water Sampled: May-01-18 12:41 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.50		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**C12b (1805005-44) Matrix: Water Sampled: May-01-18 12:47 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	5.67		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**C13a (1805005-45) Matrix: Water Sampled: May-01-18 13:30 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	1.69		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**C13b (1805005-46) Matrix: Water Sampled: May-01-18 13:39 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	6.97		0.80	3.00	mg/L	20	B18E036	May-14-18	May-23-18

**D1a (1805005-47) Matrix: Water Sampled: May-01-18 14:19 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	3.19		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**D1b (1805005-48) Matrix: Water Sampled: May-01-18 14:26 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	7.13		0.80	3.00	mg/L	20	B18E036	May-14-18	May-23-18



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Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

**Reported:**  
Jun-12-18 11:04

**Phosphorus, Colorimetric, EPA 365.4 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**D2a (1805005-49) Matrix: Water Sampled: May-01-18 15:00 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	1.07		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**D2b (1805005-50) Matrix: Water Sampled: May-01-18 15:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	3.03		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**D3a (1805005-51) Matrix: Water Sampled: May-01-18 15:41 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	3.73		0.08	0.30	mg/L	2	B18E036	May-14-18	May-23-18

**D3b (1805005-52) Matrix: Water Sampled: May-01-18 15:48 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	10.0		0.80	3.00	mg/L	20	B18E036	May-14-18	May-23-18

**D4a (1805005-53) Matrix: Water Sampled: May-01-18 16:19 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	1.77		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

**D4b (1805005-54) Matrix: Water Sampled: May-01-18 16:26 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Phosphorus	2.76		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18





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Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Total Kjeldahl Nitrogen, EPA 351.2 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**A1a (1805005-01) Matrix: Water Sampled: Apr-30-18 07:19 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.50		0.40	1.00	mg/L	2	B18E029	May-10-18	May-11-18

**A1b (1805005-02) Matrix: Water Sampled: Apr-30-18 07:32 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.41		0.40	1.00	mg/L	2	B18E029	May-10-18	May-11-18

**A2a (1805005-03) Matrix: Water Sampled: Apr-30-18 08:15 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.72		0.40	1.00	mg/L	2	B18E029	May-10-18	May-11-18

**A2b (1805005-04) Matrix: Water Sampled: Apr-30-18 08:24 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.82		0.40	1.00	mg/L	2	B18E029	May-10-18	May-11-18

**A3a (1805005-05) Matrix: Water Sampled: Apr-30-18 09:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.25		0.40	1.00	mg/L	2	B18E029	May-10-18	May-11-18

**A3b (1805005-06) Matrix: Water Sampled: Apr-30-18 09:14 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.69		0.40	1.00	mg/L	2	B18E029	May-10-18	May-11-18

**A4 Equip (1805005-07) Matrix: Water Sampled: Apr-30-18 09:38 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E029	May-10-18	May-11-18

**A3a (Dup) (1805005-08) Matrix: Water Sampled: Apr-30-18 09:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	U		0.40	1.00	mg/L	2	B18E029	May-10-18	May-11-18



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Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Total Kjeldahl Nitrogen, EPA 351.2 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**FB1 (1805005-09) Matrix: Water Sampled: Apr-30-18 09:49 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E029	May-10-18	May-11-18

**A4a (1805005-10) Matrix: Water Sampled: Apr-30-18 09:58 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.05		0.40	1.00	mg/L	2	B18E029	May-10-18	May-11-18

**A4b (1805005-11) Matrix: Water Sampled: Apr-30-18 10:09 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.44		0.40	1.00	mg/L	2	B18E029	May-10-18	May-11-18

**B1a (1805005-12) Matrix: Water Sampled: Apr-30-18 10:51 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.59		0.40	1.00	mg/L	2	B18E029	May-10-18	May-11-18

**B1b (1805005-13) Matrix: Water Sampled: Apr-30-18 10:58 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	2.79		0.40	1.00	mg/L	2	B18E029	May-10-18	May-11-18

**B2a (1805005-14) Matrix: Water Sampled: Apr-30-18 11:40 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	U	J	0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**B2b (1805005-15) Matrix: Water Sampled: Apr-30-18 11:48 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	U		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**B3a (1805005-16) Matrix: Water Sampled: Apr-30-18 12:29 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.52		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18



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Jun-12-18 11:04

**Total Kjeldahl Nitrogen, EPA 351.2 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**B3b (1805005-17) Matrix: Water Sampled: Apr-30-18 12:36 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.50		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**B4a (1805005-18) Matrix: Water Sampled: Apr-30-18 13:10 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.29		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**B4b (1805005-19) Matrix: Water Sampled: Apr-30-18 13:41 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	5.34		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**C1a (1805005-20) Matrix: Water Sampled: Apr-30-18 15:02 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	U		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**C1b (1805005-21) Matrix: Water Sampled: Apr-30-18 15:27 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.00	J	0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**C2a (1805005-22) Matrix: Water Sampled: Apr-30-18 16:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	U		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**C2b (1805005-23) Matrix: Water Sampled: Apr-30-18 16:14 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.23		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**C3a (1805005-24) Matrix: Water Sampled: Apr-30-18 14:16 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	2.11		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18



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Reported:  
Jun-12-18 11:04

**Total Kjeldahl Nitrogen, EPA 351.2 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**C3b (1805005-25) Matrix: Water Sampled: Apr-30-18 14:26 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.06		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**C5Aa (1805005-26) Matrix: Water Sampled: May-01-18 06:29 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.12		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**C5Ab (1805005-27) Matrix: Water Sampled: May-01-18 06:43 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	2.64		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**C6a (1805005-28) Matrix: Water Sampled: May-01-18 07:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.35		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**C6b (1805005-29) Matrix: Water Sampled: May-01-18 07:15 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.18		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**C7a (1805005-30) Matrix: Water Sampled: May-01-18 07:48 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	U		0.40	1.00	mg/L	2	B18E032	May-11-18	May-23-18

**C7b (1805005-31) Matrix: Water Sampled: May-01-18 08:02 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	U	J	0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**FB2 (1805005-32) Matrix: Water Sampled: May-01-18 07:39 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	U		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18



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Reported:  
Jun-12-18 11:04

**Total Kjeldahl Nitrogen, EPA 351.2 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**C7 equip (1805005-33)**

**Matrix: Water      Sampled: May-01-18 07:38      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	U		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C7b Dup (1805005-34)**

**Matrix: Water      Sampled: May-01-18 08:02      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.37		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C8a (1805005-35)**

**Matrix: Water      Sampled: May-01-18 08:35      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.22		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C8b (1805005-36)**

**Matrix: Water      Sampled: May-01-18 08:42      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.30		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C9a (1805005-37)**

**Matrix: Water      Sampled: May-01-18 10:00      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.23		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C9b (1805005-38)**

**Matrix: Water      Sampled: May-01-18 10:21      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.34		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C10a (1805005-39)**

**Matrix: Water      Sampled: May-01-18 11:05      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.50		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C10b (1805005-40)**

**Matrix: Water      Sampled: May-01-18 11:12      Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	5.23		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18



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Reported:  
Jun-12-18 11:04

**Total Kjeldahl Nitrogen, EPA 351.2 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**C11a (1805005-41) Matrix: Water Sampled: May-01-18 11:46 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.54	J	0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C11b (1805005-42) Matrix: Water Sampled: May-01-18 11:52 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	2.00		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C12a (1805005-43) Matrix: Water Sampled: May-01-18 12:41 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	6.77		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C12b (1805005-44) Matrix: Water Sampled: May-01-18 12:47 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	6.75		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C13a (1805005-45) Matrix: Water Sampled: May-01-18 13:30 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.12		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**C13b (1805005-46) Matrix: Water Sampled: May-01-18 13:39 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	4.52		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**D1a (1805005-47) Matrix: Water Sampled: May-01-18 14:19 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.73		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**D1b (1805005-48) Matrix: Water Sampled: May-01-18 14:26 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	3.47		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18



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Reported:  
Jun-12-18 11:04

**Total Kjeldahl Nitrogen, EPA 351.2 (modified)**  
**US EPA Region 5 Chicago Regional Laboratory**

**D2a (1805005-49) Matrix: Water Sampled: May-01-18 15:00 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.01		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**D2b (1805005-50) Matrix: Water Sampled: May-01-18 15:06 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	2.60		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**D3a (1805005-51) Matrix: Water Sampled: May-01-18 15:41 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.86		0.40	1.00	mg/L	2	B18E060	May-23-18	May-29-18

**D3b (1805005-52) Matrix: Water Sampled: May-01-18 15:48 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	4.51		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**D4a (1805005-53) Matrix: Water Sampled: May-01-18 16:19 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.49		0.40	1.00	mg/L	2	B18E060	May-23-18	May-23-18

**D4b (1805005-54) Matrix: Water Sampled: May-01-18 16:26 Received: May-02-18 09:55**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Kjeldahl Nitrogen	1.62		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18



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Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Phosphorus, Colorimetric, EPA 365.4 (modified) - Quality Control**  
**US EPA Region 5 Chicago Regional Laboratory**

**Batch B18E028 - EPA 365.4 (TP)**

**Blank (B18E028-BLK1)**

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	U		0.04	0.15	mg/L						

**LCS (B18E028-BS1)**

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	0.95		0.04	0.15	mg/L	1.000		95%	89-111		

**Duplicate (B18E028-DUP1)**

Source: 1805005-05

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	3.90		0.08	0.30	mg/L		3.68			6	10

**Duplicate (B18E028-DUP2)**

Source: 1805005-11

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	2.40		0.08	0.30	mg/L		2.37			1	10

**MRL Check (B18E028-MRL1)**

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	0.13				mg/L	0.1500		89%	68-132		

**Matrix Spike (B18E028-MS1)**

Source: 1805005-05

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	5.59		0.08	0.30	mg/L	2.000	3.68	95%	79-124		

**Matrix Spike (B18E028-MS2)**

Source: 1805005-11

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	4.37		0.08	0.30	mg/L	2.000	2.37	100%	79-124		

**Batch B18E031 - EPA 365.4 (TP)**





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Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Phosphorus, Colorimetric, EPA 365.4 (modified) - Quality Control**  
**US EPA Region 5 Chicago Regional Laboratory**

**Batch B18E031 - EPA 365.4 (TP)**

**Blank (B18E031-BLK1)**

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	U		0.04	0.15	mg/L						

**LCS (B18E031-BS1)**

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	1.04		0.04	0.15	mg/L	1.000		104%	89-111		

**Duplicate (B18E031-DUP1)**

Source: 1805005-14

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	2.90		0.08	0.30	mg/L		2.93			1	10

**Duplicate (B18E031-DUP2)**

Source: 1805005-21

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	8.66		0.08	0.30	mg/L		9.13			5	10

**MRL Check (B18E031-MRL1)**

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	0.16				mg/L	0.1500		106%	68-132		

**Matrix Spike (B18E031-MS1)**

Source: 1805005-14

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	4.83		0.08	0.30	mg/L	2.000	2.93	95%	79-124		

**Matrix Spike (B18E031-MS2)**

Source: 1805005-21

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	13.3	Q	0.08	0.30	mg/L	2.000	9.13	210%	79-124		

**Batch B18E036 - EPA 365.4 (TP)**



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Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Phosphorus, Colorimetric, EPA 365.4 (modified) - Quality Control**  
**US EPA Region 5 Chicago Regional Laboratory**

**Batch B18E036 - EPA 365.4 (TP)**

**Blank (B18E036-BLK1)**

Prepared: May-14-18 Analyzed: Jun-06-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	U		0.04	0.15	mg/L						

**LCS (B18E036-BS1)**

Prepared: May-14-18 Analyzed: Jun-06-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	1.04		0.04	0.15	mg/L	1.000		104%	89-111		

**Duplicate (B18E036-DUP1)**

Source: 1805005-31

Prepared: May-14-18 Analyzed: May-29-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	1.71	Q	0.08	0.30	mg/L		1.47			15	10

**Duplicate (B18E036-DUP2)**

Source: 1805005-41

Prepared: May-14-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	2.45		0.08	0.30	mg/L		2.64			7	10

**Duplicate (B18E036-DUP3)**

Source: 1805005-51

Prepared: May-14-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	3.40		0.08	0.30	mg/L		3.73			9	10

**Duplicate (B18E036-DUP4)**

Source: 1805007-08

Prepared: May-14-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	0.54		0.04	0.15	mg/L		0.55			2	10

**Duplicate (B18E036-DUP5)**

Source: 1805007-11

Prepared: May-14-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	2.20		0.04	0.15	mg/L		2.17			1	10

**MRL Check (B18E036-MRL1)**

Prepared: May-14-18 Analyzed: Jun-06-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit



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Project Number: CB022018  
Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Phosphorus, Colorimetric, EPA 365.4 (modified) - Quality Control**  
**US EPA Region 5 Chicago Regional Laboratory**

**Batch B18E036 - EPA 365.4 (TP)**

**MRL Check (B18E036-MRL1)**

**Prepared: May-14-18 Analyzed: Jun-06-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	0.16				mg/L	0.1500		104%	68-132		

**Matrix Spike (B18E036-MS1)**

**Source: 1805005-31**

**Prepared: May-14-18 Analyzed: May-29-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	10.2	Q	0.80	3.00	mg/L	2.000	1.47	436%	79-124		

**Matrix Spike (B18E036-MS2)**

**Source: 1805005-41**

**Prepared: May-14-18 Analyzed: May-23-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	3.84	Q	0.08	0.30	mg/L	2.000	2.64	60%	79-124		

**Matrix Spike (B18E036-MS3)**

**Source: 1805005-51**

**Prepared: May-14-18 Analyzed: May-23-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	5.32		0.08	0.30	mg/L	2.000	3.73	80%	79-124		

**Matrix Spike (B18E036-MS4)**

**Source: 1805007-08**

**Prepared: May-14-18 Analyzed: May-23-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	1.46		0.04	0.15	mg/L	1.000	0.55	91%	79-124		

**Matrix Spike (B18E036-MS5)**

**Source: 1805007-11**

**Prepared: May-14-18 Analyzed: May-23-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Phosphorus	3.11		0.40	1.50	mg/L	1.000	2.17	94%	79-124		



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Reported:  
Jun-12-18 11:04

**Total Kjeldahl Nitrogen, EPA 351.2 (modified) - Quality Control**  
**US EPA Region 5 Chicago Regional Laboratory**

**Batch B18E029 - EPA 365.4 (TP)**

**Blank (B18E029-BLK1)**

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L						

**LCS (B18E029-BS1)**

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	2.15		0.20	0.50	mg/L	2.000		107%	90-110		

**Duplicate (B18E029-DUP1)**

Source: 1805005-05

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	1.17		0.40	1.00	mg/L		1.25			6	24

**Duplicate (B18E029-DUP2)**

Source: 1805005-11

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	1.16		0.40	1.00	mg/L		1.44			22	24

**MRL Check (B18E029-MRL1)**

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	0.39				mg/L	0.5000		78%	74-153		

**Matrix Spike (B18E029-MS1)**

Source: 1805005-05

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	5.34		0.40	1.00	mg/L	4.000	1.25	102%	90-110		

**Matrix Spike (B18E029-MS2)**

Source: 1805005-11

Prepared: May-10-18 Analyzed: May-11-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	5.17		0.40	1.00	mg/L	4.000	1.44	93%	90-110		

**Batch B18E032 - EPA 365.4 (TP)**



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Project Number: CB022018  
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Reported:  
Jun-12-18 11:04

**Total Kjeldahl Nitrogen, EPA 351.2 (modified) - Quality Control**  
**US EPA Region 5 Chicago Regional Laboratory**

**Batch B18E032 - EPA 365.4 (TP)**

**Blank (B18E032-BLK1)**

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L						

**LCS (B18E032-BS1)**

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	1.83		0.20	0.50	mg/L	2.000		91%	90-110		

**Duplicate (B18E032-DUP1)**

Source: 1805005-14

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	U		0.40	1.00	mg/L		0.80				24

**Duplicate (B18E032-DUP2)**

Source: 1805005-21

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	U		0.40	1.00	mg/L		1.00				24

**MRL Check (B18E032-MRL1)**

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	0.46				mg/L	0.5000		92%	74-153		

**Matrix Spike (B18E032-MS1)**

Source: 1805005-14

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	0.90	I, Q	0.40	1.00	mg/L	4.000	0.80	2%	90-110		

**Matrix Spike (B18E032-MS2)**

Source: 1805005-21

Prepared: May-11-18 Analyzed: May-23-18

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	1.03	Q	0.40	1.00	mg/L	4.000	1.00	0.8%	90-110		

**Batch B18E060 - EPA 365.4 (TP)**



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Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Total Kjeldahl Nitrogen, EPA 351.2 (modified) - Quality Control**  
**US EPA Region 5 Chicago Regional Laboratory**

**Batch B18E060 - EPA 365.4 (TP)**

**Blank (B18E060-BLK1)**

**Prepared & Analyzed: May-23-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L						

**Blank (B18E060-BLK2)**

**Prepared & Analyzed: May-23-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L						

**LCS (B18E060-BS1)**

**Prepared & Analyzed: May-23-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	1.96		0.20	0.50	mg/L	2.000		98%	90-110		

**Duplicate (B18E060-DUP1)**

**Source: 1805005-31**

**Prepared: May-23-18 Analyzed: May-29-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	0.96	J	0.40	1.00	mg/L		0.82			16	24

**Duplicate (B18E060-DUP2)**

**Source: 1805005-41**

**Prepared & Analyzed: May-23-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	0.35	J, Q	0.20	0.50	mg/L		1.54			126	24

**Duplicate (B18E060-DUP3)**

**Source: 1805005-51**

**Prepared: May-23-18 Analyzed: May-29-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	1.50		0.40	1.00	mg/L		1.86			21	24

**Duplicate (B18E060-DUP4)**

**Source: 1805007-08**

**Prepared & Analyzed: May-23-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	0.20	J	0.20	0.50	mg/L		U				24

**Duplicate (B18E060-DUP5)**

**Source: 1805007-11**

**Prepared & Analyzed: May-23-18**

Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit



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Project Manager: Cheryl Burdett

Reported:  
Jun-12-18 11:04

**Total Kjeldahl Nitrogen, EPA 351.2 (modified) - Quality Control**  
**US EPA Region 5 Chicago Regional Laboratory**

**Batch B18E060 - EPA 365.4 (TP)**

Duplicate (B18E060-DUP5)		Source: 1805007-11			Prepared & Analyzed: May-23-18						
Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	1.06		0.20	0.50	mg/L		1.18			10	24

MRL Check (B18E060-MRL1)		Source: 1805007-11			Prepared & Analyzed: May-23-18						
Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	0.41				mg/L	0.5000		82%	74-153		

Matrix Spike (B18E060-MS1)		Source: 1805005-31			Prepared: May-23-18 Analyzed: May-29-18						
Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	4.88		0.40	1.00	mg/L	4.000	0.82	101%	90-110		

Matrix Spike (B18E060-MS2)		Source: 1805005-41			Prepared & Analyzed: May-23-18						
Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	0.91	Q	0.20	0.50	mg/L	4.000	1.54	NR	90-110		

Matrix Spike (B18E060-MS3)		Source: 1805005-51			Prepared: May-23-18 Analyzed: May-29-18						
Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	5.98		0.40	1.00	mg/L	4.000	1.86	103%	90-110		

Matrix Spike (B18E060-MS4)		Source: 1805007-08			Prepared & Analyzed: May-23-18						
Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	2.28	Q	0.20	0.50	mg/L	2.000	U	114%	90-110		

Matrix Spike (B18E060-MS5)		Source: 1805007-11			Prepared & Analyzed: May-23-18						
Analyte	Result	Flags / Qualifiers	MDL	Reportin Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	3.03		0.20	0.50	mg/L	2.000	1.18	93%	90-110		



Environmental Protection Agency Region 5  
**Chicago Regional Laboratory**

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Water Division, WECA Region 5  
77 West Jackson Boulevard  
Chicago IL, 60604

Project: Central Sands  
Project Number: CB022018  
Project Manager: Cheryl Burdett

**Reported:**  
Jun-12-18 11:04

**Notes and Definitions**

J The identification of the analyte is acceptable; the reported value is an estimate.  
U Not Detected  
NR Not Reported  
Q QC limit Exceeded